

CLAIMS

What is claimed is:

1. A wet/dry bare floor cleaner comprising:
 - a base;
 - a handle pivotally connected to the base;
 - a recovery system comprising:
 - a wet suction nozzle;
 - a dry suction nozzle;
 - a recovery tank for receiving wet and dry debris;
 - a working air conduit extending from each of the dry suction nozzle and the wet suction nozzle to the recovery tank;
 - a motor/fan assembly mounted to one of the handle and the base and adapted to create a working air flow in the working air conduit from at least one of the dry suction nozzle and the wet nozzle and to the recovery tank;
 - a diverter mounted in the working air conduit and movable between a dry suction position and a wet suction position for selectively at least partially blocking working air flow from the wet suction nozzle and the dry suction nozzle, respectively, to the recovery tank; and
 - the improvement comprising:
 - an actuator mounted to the handle and connected to the diverter to move the diverter between the dry suction position and the wet suction position.
2. The wet/dry bare floor cleaner according to claim 1 wherein the actuator includes a connector between the handle and the diverter so that the diverter moves between the dry suction position and the wet suction position as the handle rotates between a dry suction position and a wet suction position.
3. The wet/dry bare floor cleaner according to claim 2 wherein when the handle is in the dry suction position, the handle is pivoted towards the wet suction nozzle.

4. The wet/dry bare floor cleaner according to claim 3 wherein when the handle is in the wet suction position, the handle is pivoted towards the dry suction nozzle.

5. The wet/dry bare floor cleaner according to claim 4, wherein the base has opposite end portions, and the dry suction nozzle and the wet suction nozzle are respectively positioned at the opposite end portions of the base.

6. The wet/dry bare floor cleaner according to claim 2 wherein when the handle is in the wet suction position, it overlies one end of the base, and when it is in the dry suction position, it overlies another end of the base.

7. The wet/dry bare floor cleaner according to claim 2 wherein when the handle is in the wet suction position, the handle is pivoted towards the dry suction nozzle.

8. The wet/dry bare floor cleaner according to claim 2, wherein the diverter comprises a cylindrical barrel with an inlet at one side wall portion and an outlet at another side wall portion.

9. The wet/dry bare floor cleaner according to claim 8, wherein the diverter includes a conduit forming the outlet of the cylindrical barrel, and the handle is mounted to the conduit.

10. The wet/dry bare floor cleaner according to claim 9, wherein the conduit forms the connector between the handle and the diverter.

11. The wet/dry bare floor cleaner according to claim 8, wherein the cylindrical barrel is pivotally mounted in the base.

12. The wet/dry bare floor cleaner according to claim 2 and further comprising an agitator mounted to the base for vertical movement between a lowered position in contact with the surface to be cleaned and a raised position above the surface to be cleaned for selectively agitating the surface to be cleaned.

13. The wet/dry bare floor cleaner according to claim 12 and further comprising a connector between the agitator and the diverter for moving the agitator

between the lowered position and the raised position as the diverter moves between the wet suction position and the dry suction position.

14. The wet/dry bare floor cleaner according to claim 1 and further comprising an agitator mounted to the base for vertical movement between a lowered position in contact with the surface to be cleaned and a raised position above the surface to be cleaned for selectively agitating the surface to be cleaned.

15. The wet/dry bare floor cleaner according to claim 14 and further comprising a connector between the agitator and the diverter for moving the agitator between the lowered and raised positions.

16. The wet/dry bare floor cleaner according to claim 15, wherein the agitator is a brush that is movably mounted to the base for scrubbing the surface to be cleaned.

17. The wet/dry bare floor cleaner according to claim 16 wherein the brush is mounted to the base for rotation about a vertical axis; and further comprising a motor for driving rotational movement of the brush with respect to the base..

18. The wet/dry bare floor cleaner according to claim 14, wherein the agitator is a brush comprising a first set of bristles and a second set of bristles wherein the first bristles are longer than the second bristles and are softer than the second bristles.

19. The wet/dry bare floor cleaner according to claim 18, wherein the first and second sets of bristles are in alternating juxtaposed rows in the brush.

20. The wet/dry bare floor cleaner according to claim 1 and further comprising a fluid delivery system including:
a fluid tank;
a fluid distributor for dispensing fluid onto a surface to be cleaned; and
a fluid distribution conduit between the fluid tank and the fluid distributor.

21. A wet/dry bare floor cleaner comprising:
a base;

- a handle pivotally connected to the base;
- a recovery system comprising:
 - a wet suction nozzle;
 - a dry suction nozzle;
 - a recovery tank for receiving wet and dry debris;
 - a working air conduit extending from each of the dry suction nozzle and the wet suction nozzle to the recovery tank;
 - a motor/fan assembly mounted to one of the handle and the base and adapted to create a working air flow in the working air conduit from at least one of the dry suction nozzle and the wet nozzle and to the recovery tank;
 - a diverter mounted in the working air conduit and movable between a dry suction position and a wet suction position for selectively at least partially blocking working air flow from the wet suction nozzle and the dry suction nozzle, respectively, to the recovery tank; and
- the improvement comprising:
 - an agitator mounted to the base for vertical movement between a lowered position in contact with the surface to be cleaned and a raised position above the surface to be cleaned for selectively agitating the surface to be cleaned.

22. The wet/dry bare floor cleaner according to claim 21 and further comprising a connector between the agitator and the diverter for moving the agitator between the lowered and raised positions.

23. The wet/dry bare floor cleaner according to claim 21 wherein the agitator is a brush that is movably mounted to the base for agitating the surface to be cleaned.

24. The wet/dry bare floor cleaner according to claim 21 wherein the agitator is a brush comprising a first set of bristles and a second set of bristles wherein the first bristles are longer than the second bristles and are softer than the second bristles.

25. The wet/dry bare floor cleaner according to claim 24 wherein the first and second sets of bristles are in alternating juxtaposed rows in the brush.

26. The wet/dry bare floor cleaner according to claim 21 and further comprising:

a fluid delivery system comprising:

a fluid tank;

a fluid distributor for dispensing fluid onto a surface to be cleaned; and

a fluid distribution conduit between the fluid tank and the fluid distributor.

27. A wet/dry bare floor cleaner comprising:

a base;

a handle pivotally connected to the base;

a recovery system comprising:

a wet suction nozzle;

a dry suction nozzle;

a recovery tank for receiving wet and dry debris;

a working air conduit extending from each of the dry suction nozzle and the wet suction nozzle to the recovery tank;

a diverter mounted in the working air conduit and movable between a dry suction position and a wet suction position for selectively at least partially blocking working air flow from the wet suction nozzle and the dry suction nozzle, respectively, to the recovery tank; and

a motor/fan assembly mounted to one of the handle and the base and adapted to create a working air flow in the working air conduit from at least one of the dry suction nozzle and the wet nozzle and to the recovery tank; and

the improvement comprising:

a shut-off valve mounted in the recovery tank and adapted to prevent fluid communication between the motor/fan assembly and the recovery tank when the amount of liquid in the recovery tank reaches a first predetermined amount when the handle is in a first position forward of a vertical position and a second predetermined amount different than the first predetermined amount when the handle is in a second position rearward of the vertical position.

28. The wet/dry bare floor cleaner according to claim 27 wherein the recovery tank comprises an outlet, and the shut-off valve comprises a float adapted to close the outlet when the amount of liquid in the recovery tank reaches the first predetermined amount when the handle is in the first position and the second predetermined amount when the handle is in the second position.

29. The wet/dry bare floor cleaner according to claim 28 wherein the float is offset from a longitudinal axis of the recovery tank so that the float is below the longitudinal axis when the handle is in the first position and above the longitudinal axis when the handle is in the second position.

30. The wet/dry bare floor cleaner according to claim 27 and further comprising an actuator connected to the handle and the diverter and adapted to move the diverter between the dry suction position and the wet suction position as the handle rotates between the first position and the second position, respectively.

31. The wet/dry bare floor cleaner according to claim 27 wherein the first amount of liquid is less than the second amount of liquid.

32. The wet/dry bare floor cleaner according to claim 27 and further comprising a fluid delivery system comprising:
a fluid tank;
a fluid distributor for dispensing fluid onto a surface to be cleaned; and
a fluid distribution conduit between the fluid tank and the fluid distributor.

33. A wet/dry bare floor cleaner comprising:
a base;
a handle pivotally connected to the base for movement between a dry suction position and a wet suction position;
a recovery system comprising:
a wet suction nozzle;
a dry suction nozzle;
a recovery tank for receiving wet and dry debris;
a working air conduit extending from each of the dry suction nozzle and the wet suction nozzle to the recovery tank;

a diverter mounted in the working air conduit and movable between a dry suction position and a wet suction position for selectively at least partially blocking working air flow from the wet suction nozzle and the dry suction nozzle, respectively, to the recovery tank; and

a motor/fan assembly mounted to one of the handle and the base and adapted to create a working air flow in the working air conduit from at least one of the dry suction nozzle and the wet nozzle and to the recovery tank; and

the improvement comprising:

a bi-directional grip on the handle having a first portion adapted to be conveniently gripped by a hand of the user when the handle is in the dry suction position and a second portion which is adapted to be conveniently gripped by the hand of the user in substantially the same relative position when the handle is in the wet suction position.

34. The wet/dry bare floor cleaner according to claim 33 wherein the first portion extends away from the handle in one direction, and the second portion extends away from the handle in an opposite direction.

35. The wet/dry bare floor cleaner according to claim 34 wherein the first portion and the second portion are bilaterally symmetric.

36. The wet/dry bare floor cleaner according to claim 33 and further comprising a fluid delivery system comprising:

a fluid tank;

a fluid distributor for dispensing fluid onto a surface to be cleaned; and

a fluid distribution conduit between the fluid tank and the fluid distributor.

37. The wet/dry bare floor cleaner according to claim 36 and further comprising a trigger mounted to one of the first and second portions and connected to the fluid distribution system to distribute fluid to the surface to be cleaned.

38. The wet/dry bare floor cleaner according to claim 33 wherein the base has opposite end portions, and the dry suction nozzle and the wet suction nozzle are respectively positioned at the opposite end portions of the base.

39. The wet/dry bare floor cleaner according to claim 38 wherein when the handle is in the wet suction position, it overlies one end of the base, and when it is in the dry suction position, it overlies the opposite end of the base.